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ABSTRACT

This literature review is about the application of the ideas of Total Quality Management (TQM) in the academic side of higher learning institutions (classrooms). The methodology is solely document analysis. Findings show that TQM is a possible avenue for achieving national goals of quality for undergraduate and graduate education. The TQM classroom means a major shift from the traditional style of teaching and learning. Quality professors see themselves as guides for students, and quality students see themselves as active partners in their educational process. TQM is a possible systematic approach to improve quality in the higher education classroom continuously. (Contains 16 references.) (SLD)



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Total Quality Management in Higher Education: Applying its Principles and Practices in

the College Classroom

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Abstract

This literature review is about the application of the ideas of Total Quality Management (TQM) in the academic side of higher learning institutions (classroom). The methodology is solely document analysis. The result shows that TQM is a possible avenue for achieving national goals of quality for undergraduate and graduate education. TQM classroom means a major shift from the traditional style of teaching and learning. Quality professors see themselves as guides for students, and quality students see themselves as active partners of their educational process. TQM is a possible systematic approach to continuously improve quality in the classroom of the higher learning institutions.



Introduction

There are some problems in the American higher education institutions. Many of them concern the quality of education that students receive in the American higher learning institutions. The question is whether the teaching-learning process is being done in the best possible way. Numerous national reports have called for greater use of active modes of teaching, the creation of learning communities, increased use of collaboration, and more personal contact between students and faculty. The question now is how best to accomplish these goals (Chizmar, 1994).

The application of the ideas of Total Quality Management (TQM) to the teaching-learning process is a possible avenue for achieving national goals for undergraduate and graduate education. TQM is a philosophy that has become more and more important in the higher education institution, especially in the late 80's and the 90's. It has been a management model with good results in the business world and, lately, in the administrative side of higher learning institutions. Now is the time to ask about the implications of TQM in the academic side of the higher education institutions.

The application of TQM to the teaching-learning process in higher education institutions is the objective of this literature review. The hypothesis is that TQM is applicable in the classroom of higher education institutions. The research questions to be addressed include: (a) Which principles of TQM have a relationship with the teaching-learning process?, (b) How is the current application of TQM process in the classroom environment? The methodology is solely document analysis, reviewing all the literature that could be relevant to the objective of research.



Review of studies

Chizmar (1994) states that TQM of teaching and learning focuses attention on the management function that transforms teacher and student effort into learning. The power of a TQM teaching-learning model lies in its ability to suggest hypotheses concerning teaching strategies that enhance learning. The teaching strategies are on the quality of product, orientation to students, advocacy of teamwork, and a continuing desire to improve.

The total package of TQM attributes can be used successfully to manage the teaching and learning process. The TQM model highlights strategies that involve students actively in their own learning through the creation of learning communities and increased use of collaboration. The TQM teaching-learning model face continuous improvement, discerning feedback, empowering teachers, empowered students, and ubiquitous teamwork.

Cole (1994) mentions some forms for applying TQM philosophy to the learning process: customer focus as learner focus, employee involvement and empowerment as student participation, and continuous improvement as a continual assessment.

Assessment is comprehended as an integral part of improving the learning process.

Cornesky (1994) understands Classroom TQM as a procedure wherein everyone in the class knows the objectives of the class and adopts a quality philosophy to continuously improve the work done to meet the objectives. The benefits of using total quality management processes in the classroom are enormous. The synergy creates an experience that engages all students to become active-partners in their education. For



generations, educators have created a environment that encouraged students to become passive learners.

In TQM classrooms there is an important shift. Commonly, instructors utilize one of two teaching styles to elicit student effort: "teacher-centered" and "student-centered." Cornesky (1993) states that teacher-centered instructors concentrate on tasks and content. They rarely take time to build networks among students. Student-centered instructors build relationships and teams. They set goals as they improve teamwork among the students. They dislike performance objectives.

In this sense, Froiland (1993) argues that a commitment to total quality also means redefining the instructor's role: instead of heading the classroom hierarchy, the instructor became a coach. TQM is a student-centered approach for learning where the instructor works as a facilitator.

Perhaps the most important issues concerning TQM in the classroom surround what exactly constitutes the ideal and who defines it. Beaver (1994) states that, traditionally, the task of defining quality in education has largely been left up to the individual professor. Under TQM, this time-honored practice would change: the *customer* plays a major role in defining quality. Research on the subject indicates that in some areas students can provide useful information about an instructor's communication skills, course organization, or the appropriateness of a textbook.

Beaver (1994) argues that quality does not improve unless you measure it. In this sense, the learning process must be monitored through team evaluations, student feedback, and various types of data indicating student progress or lack thereof. TQM



requires that the quality of a service be continually assessed to correct deficiencies and improve the process, an idea that any competent professor or organization would find attractive.

The major purpose of measurement in TQM is to identify areas of weakness and then make corrections to improve the process. Continuous improvement is probably something that most effective teachers strive for, at least implicitly. In total quality management, measurement becomes more explicit, with charts and graphs (the tools of TQM) to identify problems and implement solutions. (Beaver, 1994 and Thor, 1994)

Cornesky (1993) argues that TQM allows the customer (student) to communicate with the decision-maker (professor) to continuously improve the educational process. It is essential to understand that students are not merely receptacles to be filled with information. A student is a "customer" paying for a quality education, a "worker" you oversee, and a "product" you shape and develop.

Chizmar (1994) thinks that viewing students as customers implies that teachers emphasize obtaining feedback from students as a means of determining their needs. To be 'fit for use,' such feedback should yield concrete information that can guide every classroom management decision concerning the teaching and learning process. For this author, the purest example of a classroom research technique built on quality principles is the so-called one-minute paper.

Ewell (1991) explains the minute paper as a resource intended to be administered to students at the end of every class period. It is a device that also recognizes the need for instructors to receive continuous customer feedback. The most common variant asks



students to respond to two questions. First, what is the most important thing that the student learned today, and second, what is the single thing that after today still is most unclear to you? The instructor collects the anonymous responses to the questions to help target instruction for the subsequent class period. Considerable experience with this technique (to this point primarily in community colleges) indicates that it can make a substantial contribution to instructor awareness. The minute paper helps to measure the effectiveness of presented material. Also, in contrast to the traditional end-of-course questionnaire, it makes this contribution in time to make a difference.

Other authors, have the same ideas as Chizmar and Ewell. Ord (1993) and Entner (1993) uses minute reports at the end of the class. Seymour (1993), Bateman & Roberts (1993), Sutton (1995), and Cole (1994) explains the importance of the application of the feedback tools as an ongoing activity during the course. Also, Cornesky (1993) states that TQM tools permit to measure what is going on within the classroom. Professors can start surveying student expectations and assessing your ability to adapt to those expectations on the first day of class. This first step becomes a continuous process through out the course.

Chaffee & Sherr (1992) express that too often, assessment focus on students rather than in the learning process. To a certain extent, the standard practice of giving quizzes, tests, and final examinations represents process-based assessment. The focus in these activities, however, is to test the *student*. TQM suggests that we also actively use tests of *instruction and learning*. "We might try to determine, for example, whether the lecture is an effective way to help students learn this point. Do we need to use diverse



instructional modes to accommodate students' different learning styles? Before we go on to the next concept, do we know that students have mastered its predecessor?" (Chaffee & Sherr, 1992).

Chizmar (1994) states that viewing students as employees implies that teachers empower students by involving them in the critical management decisions that affect them. Considering the premise that students who have genuine input and control will be better motivated to learn, the empowering teacher gives students a real voice in deciding how their work is to be done. It involves students directly in the process of planning and implementing the course. The empowering teacher's goal is to involve the student as a partner in his or her own learning.

In the same sense, Cornesky (1993) express that too often, instructors run their classes as traditional managers might. They act like "the boss." Universities should retrain boss-manager instructors or replace them with lead-manager instructors. A lead-manager instructor engages the student in a discussion of the quality of the work done. He or she listens and incorporates the student's suggestions into the classroom environment. The instructor becomes a facilitator and coach of the learning process. Students who actively participate in the decision-making process will probably be more successful, develop better critical thinking skills, and become lifelong learners. It is vital to make the student a lifelong learner if we are going to prepare them to meet the challenges of the next century.

In TQM classroom, teams are important. From the point of view of Chizmar (1994), students benefit from participation in a quality circle, because they gain important



decision making skills and learn to work in groups. The work in groups is a skill that corporate America contends is sorely lacking in today's college graduates. Following this idea of the importance of working in groups, Kerr (1995) clearly states that teams are replacing individuals as the basic building blocks of organizations. "More than 50% of all Fortune 500 companies use them. By the turn of the century it is estimated that 90% of all North American organizations will have some form of teams" (Kerr, 1995).

Ord, Sutton, Harris, Froiland, and Winter agree about the importance of the team work in the classroom. For Sutton (1995), having students work together in quality teams rather than competing with each other for grades improves the classroom environment significantly. A goal in the quality classroom is to give students the sense of empowerment. Students have an active rather than passive role in the learning process. The student-teacher relationship needs to be shifted away from the authoritarian model.

Finally, but not least important, is to mention that Cornesky (1993) expresses that traditional classrooms use vertical communication, essentially excluding students from the decision-making process. In contrast, TQM encourages horizontal communication, which is crucial to the success of the TQM model.



Conclusions and Recommendations

Higher education institutions are not improving their teaching styles. In a majority of higher education institutions, the main focus is research because of its relationship to financial affairs and prestige. Nevertheless, we shall never forget as educator that teaching is essential to the nature of any educational organization.

Many times, in our educational system, to be a good professor have been taken for granted. Nevertheless, to find a quality professor is not an easy task. Taking the "academic freedom" as a justification, many professors understand that quality in the classroom must be met by their own individual standards.

In the end of this literature review, I think that TQM has something to propose for the improvement of the quality of the teaching-learning process. TQM classroom means a major shift from the traditional professor (teaching-centered) to a quality professor (learning-centered). That means something compared to the Copernican revolution in physics. The earth (professors) moves around the sun (students)...

Quality professors see themselves as guides for students, seeing themselves not as *experts* who know all the answers, but rather as *helpers* who have a solid understanding of the subject matter. (Cornesky, 1993)

The quality approach shifts student's focus from evaluation (test-centered) to continuous learning. It requires students to take a more serious responsibility for their own education. The students become active-learners, active-partners of their education.

In this point, further research is needed: What kind of student can walk the talk of TQM classroom? Definitely, not all the students are prepared for this change in the



traditional style of teaching. There is a new perspective of its role in the classroom setting that demands more and more responsibility and discipline. TQM means a systematic approach to obtain quality in the classroom. The attributes of a TQM teaching-learning model is student-centered process, teamwork, empowerment, feedback, and continuous improvement.

The basic question that remains is whether higher education institutions really want to improve the quality of teaching. That question will demand an effort of understanding the theory and practice of a quality education. Besides, quality education involves the study of the new roles for the major actors of the play: the quality professor and the quality student.



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